

**Track 1 Decision
Documentation Package**

**Waste Area Group 3
Operable Unit 3-01**

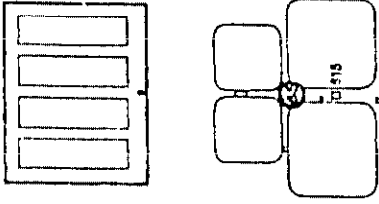
Site CPP-50

PCB Transformer Yard (CPP-731)



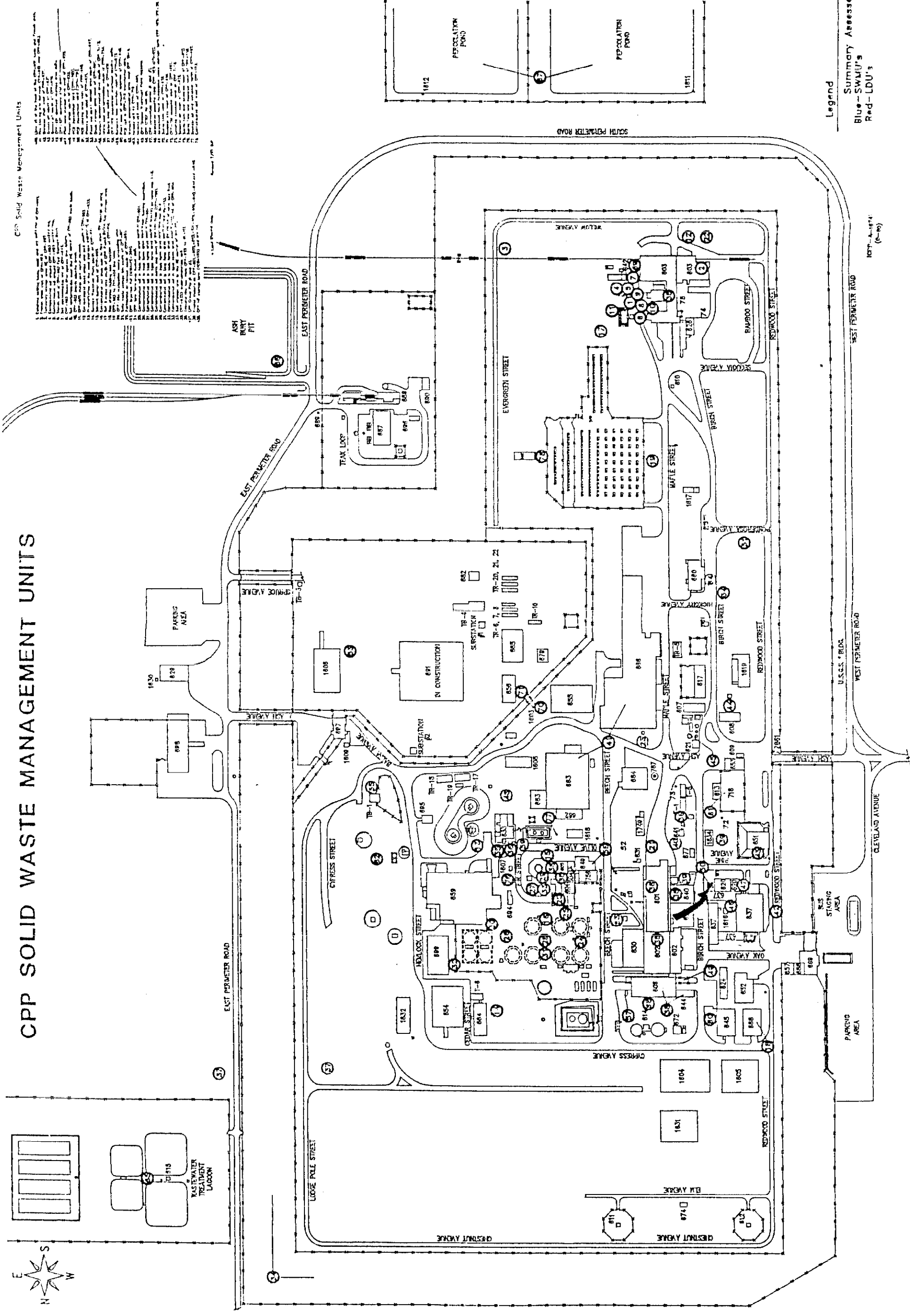
WAG 3 ENVIRONMENTAL RESTORATION PROJECT

INEL



CPP SOLID WASTE MANAGEMENT UNITS

CPP Solid Waste Management Units



Legend

Summary Assessed
Blue - SWU's
Red - LDU's

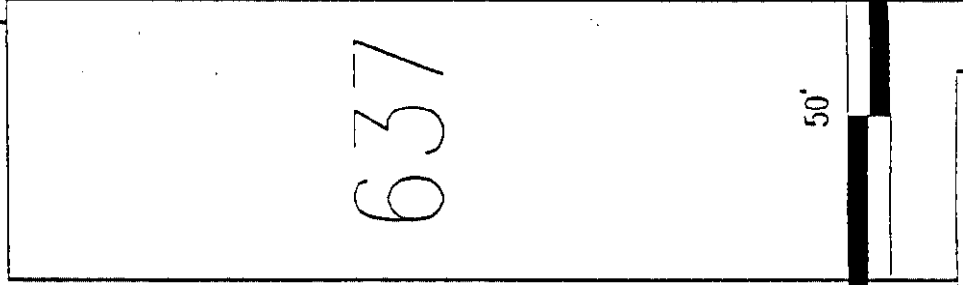
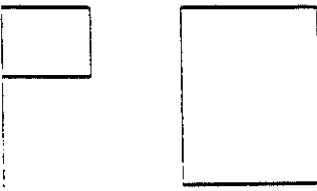
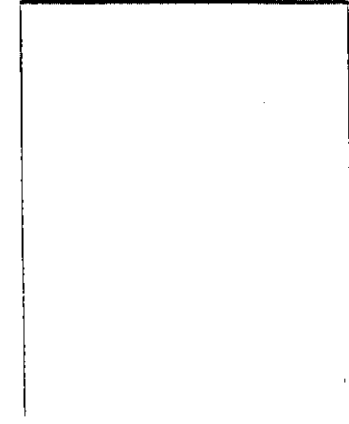
10/7/84 (10/84)

ECA-CPP-50
ZONE C-6

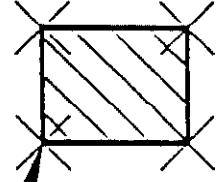
798

762

N 695,403
E 296,314

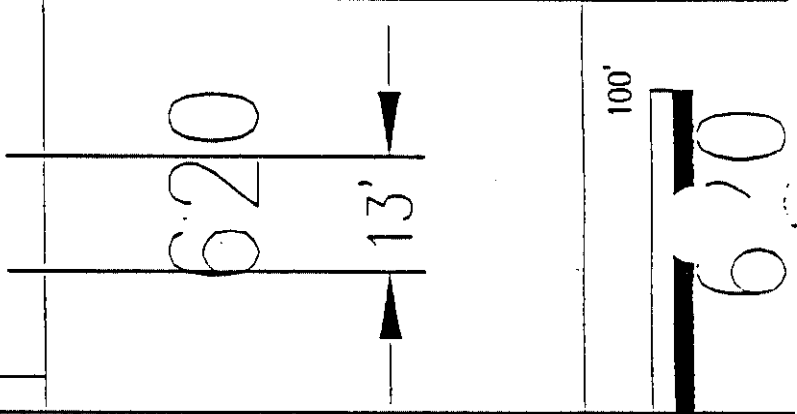
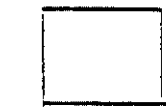


637



731

16'



620

13'

100'

50'

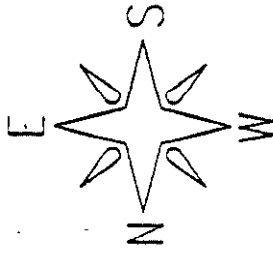
25'

10'

0



620



PINE AVENUE

DECISION DOCUMENTATION PACKAGE
COVER SHEET

PREPARED IN ACCORDANCE WITH

TRACK 1 SITES:
GUIDANCE FOR ASSESSING
LOW PROBABILITY HAZARD SITES
AT INEL

SITE DESCRIPTION: PCB TRANSFORMER YARD (CPP-731)

SITE ID: CPP-50 OPERABLE UNIT: 3-01

WASTE AREA GROUP: 3

I. SUMMARY - PHYSICAL DESCRIPTION OF THE SITE: The Idaho Chemical Processing Plant (ICPP) XFR-YDC-3 transformer was originally located in CPP-731, a transformer utilities operations area. As part of the ICPP Utilities Replacement and Expansion Project (UREP), the XFR-YDC-3 transformer was taken out of service. The transformer contained 231 gallons of oil at a concentration of 400 ppm polychlorinated biphenyls. During an inspection of the transformer in July 1985, leakage was noted. The leaked oil was observed to be isolated to the transformer concrete pad and had not appeared to impact the surrounding soil.

The transformer was removed on August 30, 1985 and shipped to a commercial disposal facility (US Pollution).

DECISION RECOMMENDATION

page 2

II. SUMMARY - QUALITATIVE ASSESSMENT OF RISK: The overall reliability of the information on this site is medium. According to the documentation and interviews, limited amounts of PCB contaminated oil were released to the transformer pad and no oil contacted the soil. The resulting risk due to a small amount of oil spilled to the concrete pad would be lower than that predicted for the soil because ingestion of the concrete would be eliminated as a pathway.

III. SUMMARY - CONSEQUENCES OF ERROR: Limited risk due to low PCB concentrations being left in place may result due to the no further action recommendation for the site.

Sampling of the site to confirm low PCB concentrations would result in an unnecessary expenditure of public funds.

IV. SUMMARY - OTHER DECISION DRIVERS: The clean-up requirements provided for in the Toxic Substances Control Act (TSCA) 40 CFR 761.125 require remediation of PCBs in Industrial Areas to 25 ppm PCBs by weight in soil. The guidance provided in OWSER Directive 9335.4-01 "Guidance for Remedial Actions at Superfund Sites with PCB Contamination" also requires clean-up at restricted access industrial sites of 25 ppm PCBs by weight in soil. This clean-up requirement is based on health risk assessment criteria using occupational exposure of site workers by soil ingestion and dermal contact as the exposure scenario. Provided the established criteria in TSCA are considered an ARAR for the INEL, the existing soil concentrations (0 ppm) can be left in place and no further action is recommended for this site. This ARAR, together with the very conservative assumptions used in performing the Track 1 risk assessment, provides for a reasonable foundation for recommending no further action at this site.

RECOMMENDED ACTION: NO FURTHER ACTION.

SIGNATURES	# PAGES:	DATE:
Prepared By: <i>Bin R. Fan</i>	DOE WAG Manager:	
Approved By:	Independent Review:	

DECISION STATEMENT
(BY DOE RPM)

page 3

DATE RECD: 4/17/92

DISPOSITION:

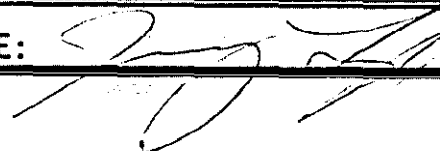
3" thick pool, no evidence of soil staining, X fence removed in '85 therefore no further action required at this time. ROD will include this source

DATE: 4/17/92

PAGES (DECISION STATEMENT):

NAME: JERRY L. LEO

SIGNATURE:



DECISION STATEMENT
(BY EPA RPM)

page 4

DATE RECD:

4/9/92

DISPOSITION:

Initial 231 gal \leq 400 ppm xfmr with small leaks evident. No evidence of oil staining. xfmr removed in '85. NO evidence of oil staining reconfirmed in '92. Given 3' thick pad no further remedial investigation appears warranted. Decision will be finalized in future ROD.

DATE:

4/16/92

PAGES (DECISION STATEMENT):

1

NAME:

Wayne Pleiss

SIGNATURE:

Wayne Pleiss

DECISION STATEMENT
(BY STATE RPM)

CPP-50

page 5

DATE RECD:

DISPOSITION: Based on the removal of the PCB
transformer and on the spot contamination of
the concrete pad, there is not an unacceptable
risk posed by this site.
This decision will be reviewed at the
time of the final Record of Decision.

DATE:

4/9/92

PAGES (DECISION STATEMENT):

NAME:

Dean J. Nygard

SIGNATURE:

Dean J. Nygard

PROCESS/WASTE WORKSHEET

SITE ID CPP-50

page 6

Col 1 Processes Associated with this Site	Col 2 Waste Description & Handling Procedures	Col 3 Description & Location of any Artifacts/Structures/Disposal Areas Associated with this Waste or Process
Process PCB Transformer Pad	PCB transformer leaked to concrete transformer pad.	Artifact: Concrete Pad Location: CPP-50 Description: Transformer Pad contaminated with PCBs
		Artifact: Soil surrounding the transformer pad Location: CPP-50 Description: Reported leak did not impact soil
		Artifact Location Description
		Artifact Location Description
Process		Artifact Location Description
		Artifact Location Description
		Artifact Location Description
Process		Artifact Location Description
		Artifact Location Description
		Artifact Location Description

CONTAMINANT WORKSHEET

page 7

SITE ID CPP-50PROCESS (col 1) PCB TransformerWASTE (col 2) PCBs

Col 4 What known/potential hazardous substances/constituents are associated with this waste or process?	Col 5 Potential sources associated with this hazardous material	Col 6 Known/estimated concentration of hazardous substances/constituents ^a	Col 7 Risk based concentration mg/kg	Col 8 Qualitative risk assessment (Hi/Med/Lo)	Col 9 Overall reliability (Hi/Med/Lo)
PCBs	Concrete pad	unknown	NA	Lo	Med
PCBs	Soil	0 ppm	0.08 ppm	Lo	Med

a. ND = not detected

DBL = detection limit in ppm

QUALITATIVE RISK AND RELIABILITY EVALUATION TABLE			
	QUALITATIVE RISK		
	Low	Medium	High
HIGHLY UN-RELIABLE	screening data	TRACK II	screening data
HIGHLY RELIABLE	No * ACTION REQUIRED	RI/FS	INTERIM ACTION
reliability	LOW concentration resulting in risk < 10^{-4}	MEDIUM	HIGH concentration resulting in risk > 10^{-4}
	qualitative risk		

* if there exist sufficient data to identify an appropriate remedy

Question 1. What are the waste generation process locations and dates of operation associated with this site?

Block 1 Answer: The Idaho Chemical Processing Plant (ICPP) XRF-YDC-3 transformer was originally located in CPP-731, a transformer utilities operations area. As part of the ICPP Utilities Replacement and Expansion Project (UREP), the XFR-YDC-3 transformer was taken out of service. The transformer contained 231 gallons of oil at a concentration of 400 ppm polychlorinated biphenyls. During an inspection of the transformer in July 1985, leakage was noted. The leaked oil was observed to be isolated to the transformer concrete pad and had not impacted the surrounding soil.

The transformer was removed on August 31, 1985 and shipped to a commercial disposal facility (US Pollution).

Block 2 How reliable is/are the information source/s? High X Med Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The information is contained in the Closure Plan for CPP-731 and indicates that a small spill to the concrete pad occurred.

Block 3 Has this INFORMATION been confirmed? X Yes No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

The information is contained in the Closure Plan for CPP-731 and indicates that a small spill to the concrete pad occurred.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input type="checkbox"/>	_____	Analytical data	<input type="checkbox"/>	_____
Anecdotal	<input checked="" type="checkbox"/>	2	Documentation about data	<input type="checkbox"/>	_____
Historical process data	<input type="checkbox"/>	_____	Disposal data	<input type="checkbox"/>	_____
Current process data	<input type="checkbox"/>	_____	Q.A. data	<input type="checkbox"/>	_____
Areal photographs	<input type="checkbox"/>	_____	Safety analysis report	<input type="checkbox"/>	_____
Engineering/site drawings	<input type="checkbox"/>	_____	D&D report	<input type="checkbox"/>	_____
Unusual Occurrence Report	<input type="checkbox"/>	_____	Initial assessment	<input type="checkbox"/>	_____
Summary documents	<input type="checkbox"/>	_____	Well data	<input type="checkbox"/>	_____
Facility SOPs	<input type="checkbox"/>	_____	Construction data	<input type="checkbox"/>	_____
OTHER	<input checked="" type="checkbox"/>	1			

Question 2. What are the disposal process locations and dates of operation associated with this site?

Block 1 Answer: The transformer contained 231 gallons of oil at a concentration of 400 ppm polychlorinated biphenyls. During an inspection of the transformer in July 1985, leakage was noted. The leaked oil was observed to be isolated to the transformer concrete pad and had not appeared to impact the surrounding soil.

Block 2 How reliable is/are the information source/s? High ☒ Med ☐ Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The closure plan describes the location of the spill as being restricted to the concrete pad.

Block 3 Has this INFORMATION been confirmed? Yes ☐ No ☒ (check one)

IF SO, DESCRIBE THE CONFIRMATION.

The closure plan describes the location of the spill as being restricted to the concrete pad.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input checked="" type="checkbox"/>	<u>2</u>
Anecdotal	<input type="checkbox"/>	<u> </u>
Historical process data	<input type="checkbox"/>	<u> </u>
Current process data	<input type="checkbox"/>	<u> </u>
Aerial photographs	<input type="checkbox"/>	<u> </u>
Engineering/site drawings	<input type="checkbox"/>	<u> </u>
Unusual Occurrence Report	<input type="checkbox"/>	<u> </u>
Summary documents	<input type="checkbox"/>	<u> </u>
Facility SOPs	<input type="checkbox"/>	<u> </u>
OTHER	<input checked="" type="checkbox"/>	<u>1</u>

Analytical data	<input type="checkbox"/>	<u> </u>
Documentation about data	<input type="checkbox"/>	<u> </u>
Disposal data	<input type="checkbox"/>	<u> </u>
Q.A. data	<input type="checkbox"/>	<u> </u>
Safety analysis report	<input type="checkbox"/>	<u> </u>
D&D report	<input type="checkbox"/>	<u> </u>
Initial assessment	<input type="checkbox"/>	<u> </u>
Well data	<input type="checkbox"/>	<u> </u>
Construction data	<input type="checkbox"/>	<u> </u>

Question 3. Is there empirical, circumstantial, or other evidence of migration?
If so, what is it?

Block 1 Answer:

There is no evidence of migration from this site.

Block 2 How reliable is/are the information source/s? __High X Med __Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

No evidence of migration off of the transformer pad would indicate no migration from the site.

Block 3 Has this INFORMATION been confirmed? __Yes X No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input type="checkbox"/>	_____
Anecdotal	<input checked="" type="checkbox"/>	<u>2</u>
Historical process data	<input type="checkbox"/>	_____
Current process data	<input type="checkbox"/>	_____
Aerial photographs	<input type="checkbox"/>	_____
Engineering/site drawings	<input type="checkbox"/>	_____
Unusual Occurrence Report	<input type="checkbox"/>	_____
Summary documents	<input type="checkbox"/>	_____
Facility SOPs	<input type="checkbox"/>	_____
OTHER	<input checked="" type="checkbox"/>	<u>1</u>

Analytical data	<input type="checkbox"/>	_____
Documentation about data	<input type="checkbox"/>	_____
Disposal data	<input type="checkbox"/>	_____
Q.A. data	<input type="checkbox"/>	_____
Safety analysis report	<input type="checkbox"/>	_____
D&D report	<input type="checkbox"/>	_____
Initial assessment	<input type="checkbox"/>	_____
Well data	<input type="checkbox"/>	_____
Construction data	<input type="checkbox"/>	_____

Question 4. Is there evidence that a source exists at this site? If so, list the sources and describe the evidence.

Block 1 Answer: No. During an inspection of the transformer in July 1985, leakage was noted. The leaked oil was observed to be isolated to the transformer concrete pad and had not appeared to impact the surrounding soil.

The transformer was removed on August 30, 1985 and shipped to a commercial disposal facility (US Pollution).

Block 2 How reliable is/are the information source/s? High X Med Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

A recent inspection of the site verified that the transformer has been replaced and that there is no evidence of contamination on the transformer pad.

Block 3 Has this INFORMATION been confirmed? X Yes No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

A recent inspection of the site verified that the transformer has been replaced and that there is no evidence of contamination on the transformer pad.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[]	_____	Analytical data	[]	_____
Anecdotal	[X]	2	Documentation about data	[]	_____
Historical process data	[]	_____	Disposal data	[]	_____
Current process data	[]	_____	Q.A. data	[]	_____
Aerial photographs	[]	_____	Safety analysis report	[]	_____
Engineering/site drawings	[]	_____	D&D report	[]	_____
Unusual Occurrence Report	[]	_____	Initial assessment	[]	_____
Summary documents	[]	_____	Well data	[]	_____
Facility SOPs	[]	_____	Construction data	[]	_____
OTHER	[X]	1			

Question 5. Does site operating or disposal historical information allow estimation of the pattern of potential contamination? If the pattern is expected to be a scattering of hot spots, what is the expected minimum size of a significant hot spot?

Block 1 Answer: During an inspection of the transformer in July 1985, leakage was noted. The leaked oil was observed to be isolated to the transformer concrete pad and had not appeared to impact the surrounding soil. There is no indication of soil contamination or a pattern of contamination other than the oil spot on the concrete.

Block 2 How reliable is/are the information source/s? High X Med Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The closure report details the results of the transformer inspection.

Block 3 Has this INFORMATION been confirmed? Yes X No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input type="checkbox"/>	_____	Analytical data	<input type="checkbox"/>	_____
Anecdotal	<input checked="" type="checkbox"/>	2	Documentation about data	<input type="checkbox"/>	_____
Historical process data	<input type="checkbox"/>	_____	Disposal data	<input type="checkbox"/>	_____
Current process data	<input type="checkbox"/>	_____	Q.A. data	<input type="checkbox"/>	_____
Aerial photographs	<input type="checkbox"/>	_____	Safety analysis report	<input type="checkbox"/>	_____
Engineering/site drawings	<input type="checkbox"/>	_____	D&D report	<input type="checkbox"/>	_____
Unusual Occurrence Report	<input type="checkbox"/>	_____	Initial assessment	<input type="checkbox"/>	_____
Summary documents	<input type="checkbox"/>	_____	Well data	<input type="checkbox"/>	_____
Facility SOPs	<input type="checkbox"/>	_____	Construction data	<input type="checkbox"/>	_____
OTHER	<input checked="" type="checkbox"/>	1			

Question 6. Estimate the length, width, and depth of the contaminated region. What is the known or estimated volume of the source? If this is an estimated volume, explain carefully how the estimate was derived.

Block 1 Answer: The entire region of CPP-50 is approximately 100 feet long, 50 feet wide and 6 inches deep. This volume of soil was used to complete the risk assessment. The contaminated region is restricted to the surface of the concrete pad. The concrete pad is three feet thick. Recent inspections of the concrete pad indicate that no visual evidence of surface staining is present.

Block 2 How reliable is/are the information source/s? High X Med Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The closure plan indicates that the soil has not been impacted.

Block 3 Has this INFORMATION been confirmed? Yes X No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

The closure plan indicates that the soil has not been impacted.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input type="checkbox"/>	_____
Anecdotal	<input checked="" type="checkbox"/>	2
Historical process data	<input type="checkbox"/>	_____
Current process data	<input type="checkbox"/>	_____
Aerial photographs	<input type="checkbox"/>	_____
Engineering/site drawings	<input type="checkbox"/>	_____
Unusual Occurrence Report	<input type="checkbox"/>	_____
Summary documents	<input type="checkbox"/>	_____
Facility SOPs	<input type="checkbox"/>	_____
OTHER	<input checked="" type="checkbox"/>	1

Analytical data	<input type="checkbox"/>	_____
Documentation about data	<input type="checkbox"/>	_____
Disposal data	<input type="checkbox"/>	_____
Q.A. data	<input type="checkbox"/>	_____
Safety analysis report	<input type="checkbox"/>	_____
D&D report	<input type="checkbox"/>	_____
Initial assessment	<input type="checkbox"/>	_____
Well data	<input type="checkbox"/>	_____
Construction data	<input type="checkbox"/>	_____

Question 7. What is the known or estimated quantity of hazardous substance/constituent at this source? If the quantity is an estimate, explain carefully how the estimate was derived.

Block 1 Answer: The transformer contained 231 gallons of oil at a concentration of 400 ppm polychlorinated biphenyls. The transformer was removed on August 30, 1985 and shipped to a commercial disposal facility (US Pollution). During an inspection of the transformer in July 1985, leakage was noted. The leaked oil was observed to be isolated to the transformer concrete pad and had not appeared to impact the surrounding soil. There is no estimate of the amount of transformer oil that was released, but it can be assumed to be relatively small as the result was only spotting of the concrete.

Block 2 How reliable is/are the information source/s? High Med X Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The amount of oil that leaked from the transformer is unknown. However, the result was only spotting of the concrete, so the quantity must have been small.

Block 3 Has this INFORMATION been confirmed? Yes X No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

No confirmation of the quantity of oil that was released is available.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[]	_____
Anecdotal	[X]	2
Historical process data	[]	_____
Current process data	[]	_____
Aerial photographs	[]	_____
Engineering/site drawings	[]	_____
Unusual Occurrence Report	[]	_____
Summary documents	[]	_____
Facility SOPs	[]	_____
OTHER	[X]	1

Analytical data	[]	_____
Documentation about data	[]	_____
Disposal data	[]	_____
Q.A. data	[]	_____
Safety analysis report	[]	_____
D&D report	[]	_____
Initial assessment	[]	_____
Well data	[]	_____
Construction data	[]	_____

Question 8. Is there evidence that this hazardous substance/constituent is present at the source as it exists today? If so, describe the evidence.

Block 1 Answer: During an inspection of the transformer in July 1985, leakage was noted. The leaked oil was observed to be isolated to the transformer concrete pad and had not appeared to impact the surrounding soil.

The transformer was removed on August 30, 1985 and shipped to a commercial disposal facility (US Pollution).

Block 2 How reliable is/are the information source/s? High X Med Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The closure plan documents the leak to the concrete.

Block 3 Has this INFORMATION been confirmed? Yes X No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	[]	_____
Anecdotal	[X]	<u>2</u>
Historical process data	[]	_____
Current process data	[]	_____
Aerial photographs	[]	_____
Engineering/site drawings	[]	_____
Unusual Occurrence Report	[]	_____
Summary documents	[]	_____
Facility SOPs	[]	_____
OTHER	[X]	<u>1</u>

Analytical data	[]	_____
Documentation about data	[]	_____
Disposal data	[]	_____
Q.A. data	[]	_____
Safety analysis report	[]	_____
D&D report	[]	_____
Initial assessment	[]	_____
Well data	[]	_____
Construction data	[]	_____

REFERENCES

1. Closure Plan for CPP-731 Transformer Yard.
2. Brian Fourr (WINCO Site Remediation) Personal communication with John Nation (WINCO Engineering and Plant Projects) and Dee Williamson (WINCO Site Remediation).
3. Risk Assessment Notes Prepared by EG&G.